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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,577	12/05/2003	Kazutaka Shibata	AI 254 D1	7345
7590 06/30/2005 RADER, FISHMAN & GRAUER PLLC Suite 501 1233 20th Street, N.W. Washington, DC 20036			EXAMINER THOMAS, TONIAE M	
			ART UNIT 2822	PAPER NUMBER

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/727,577

Applicant(s)

SHIBATA, KAZUTAKA

Examiner

Toniae M. Thomas

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/05/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is a first Office action on the merits of Application Serial No. 10/727,577, which is a divisional of Application Serial No. 10/284,318 filed 31 October 2002, now US Patent No. 6,867,501.
2. The preliminary amendment filed on 05 December 2003 canceled claims 1-4 and 17-18. Accordingly, claims 5-16 are currently pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The meaning of the claim language *an insulator at between the first and second blocks* as recited in claim 5 at line 5 is unclear. The phrase “at between” renders the claim indefinite. For purposes of examination, the language has been interpreted to mean *an insulator between the first and second blocks*.

The meaning of the claim language *arranging a conductor therein onto an one surface* as recited in claim 9 at lines 3-4 is unclear. The phrase “an one” renders the claim indefinite. For purposes of examination, the language has been interpreted to mean *arranging a conductor therein onto one surface*.

The phrase *the semiconductor chips* as recited in claim 10 at line 3 lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 9 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Patti (US 6,642,081 B1).<sup>1</sup>

Patti discloses a method for manufacturing a semiconductor device (figs. 1-9 and accompanying text). The method includes: connecting face down a semiconductor chip 30 having an active surface formed with a recess arranging a conductor 52 therein onto one surface of a semiconductor substrate 20 (figs. 1, 8 and col. 6, lines 7-13); and polishing or abrading an inactive surface of the semiconductor chip 30 to expose the conductor 52 in the inactive surface of

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<sup>1</sup> Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

the semiconductor chip after the on-substrate connecting step (fig. 9 and col. 6, lines 28-31).

Another chip 40 is connected on to the semiconductor chip (fig. 1 and col. 3, lines 45-50).

The semiconductor chip 40 has an active surface formed with a recess arranging a conductor 53 therein, and is connected face down on to the semiconductor chip 30 (fig. 1). A polishing or abrading step is performed in an inactive surface of the semiconductor chip 40 to expose the conductor 53 in the inactive surface (fig. 1).

Likewise, Patti discloses a method for manufacturing a semiconductor device (figs. 1-9 and accompanying text), wherein the method includes: a step of connecting a semiconductor chip 20 on an active surface of a semiconductor substrate 30 having an active surface formed with a recess arranging a conductor 52 therein (figs. 1, 8 and col. 6, lines 7-13); and a step of polishing or abrading an inactive surface of the semiconductor substrate 30 to expose the conductor 52 (figs. 1, 9 and col. 6, lines 28-31).

***Allowable Subject Matter***

5. Claim 5 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Claims 6-8 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim, claim 5, and any intervening claims. The

Art Unit: 2822

prior art of record does not anticipate, teach or suggest a method for manufacturing a semiconductor device substantially, wherein the method comprises the combination of steps substantially as claimed.

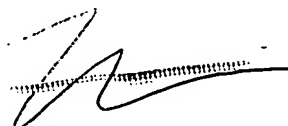
6. Claims 10-13 would be allowable (1) if rewritten in independent form including all of the limitations of the base claim, claim 9, and any intervening claims; and (2) if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toniae M. Thomas whose telephone number is (571) 272-1846. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMT  
27 June 2005



Mary Wilczewski  
Primary Examiner